

What is claimed is:

1. A communication system comprising:

a master and a slave that can communicate with each other,

said master including a first communication section for

5 transmitting a start request signal to said slave; said slave

including a second communication section for receiving the start

request signal transmitted by said master,

wherein said slave can take any of a start state in which

said slave can communicate with said master; a communication

10 control state in which at least said slave can receive the start

request signal transmitted by said master and makes a transition

to the start state upon reception of the start request signal,

or a standby state in which power is less consumed than in the

start state or the communication control state, and

15 wherein said slave further comprises a state control

section for repeatedly operating so that said slave in the

standby state is switched to the communication control state

at a predetermined timing and is switched to the standby state

when the communication control state continues for a

20 predetermined time period without receiving the start request

signal.

2. The communication system as claimed in claim 1, wherein

communications between said master and said slave are radio

25 communications, the first communication section transmits the

start request signal by radio communications, and the second communication section receives the start request signal by radio communications..

5 3. The communication system as claimed in claim 1, comprising a plurality of said slaves, wherein said master switches assignment time periods of communications with said slaves in order, thereby communicating with said slaves, and when said master transmits the start request signal, said master transmits the start request signal in the assignment time period of communications with the slave to which the start request signal is transmitted.

10 4. The communication system as claimed in claim 2, comprising a plurality of said slaves, wherein said master switches assignment time periods of communications with said slaves in order, thereby communicating with said slaves, and when said master transmits the start request signal, said master transmits the start request signal in the assignment time period of communications with the slave to which the start request signal is transmitted.

15 5. The communication system as claimed in claim 1, comprising a plurality of said slaves, wherein said master switches assignment time periods of

communications with said slaves in order, thereby communicating with said slaves, and when said master transmits the start request signal, said master transmits the start request signal using a time period between the assignment time periods of communications with said slaves.

6. The communication system as claimed in claim 2, comprising a plurality of said slaves,

wherein said master switches assignment time periods of communications with said slaves in order, thereby communicating with said slaves, and when said master transmits the start request signal, said master transmits the start request signal using a time period between the assignment time periods of communications with said slaves.

7. The communication system as claimed in claim 5, wherein the start request signal is a signal that can cause two or more slaves to make a transition from the communication control state to the start state.

8. The communication system as claimed in claim 6, wherein the start request signal is a signal that can cause two or more slaves to make a transition from the communication control state to the start state.

9. The communication system as claimed in claim 5, wherein the time period between the state control section of each slave switching said slave to the communication control state and then switching said slave to the standby state is a time period that can include one of assignment time periods to said slaves in said master and the time required for said master to transmit the start request signal.

10. The communication system as claimed in claim 6, wherein the time period between the state control section of each slave switching said slave to the communication control state and then switching said slave to the standby state is a time period that can include one of assignment time periods to said slaves in said master and the time required for said master to transmit the start request signal.

11. The communication system as claimed in claim 5, wherein said master transmits the start request signal, said master repeatedly transmits the start request signal for a longer time than the time required until, after the state control section of one of said slaves switches said slave to the communication control state, the state control section switches said slave to the standby state and further to the communication control state.

12. The communication system as claimed in claim 6, wherein said master transmits the start request signal, said master repeatedly transmits the start request signal for a longer time than the time required until, after the state control section of one of said slaves switches said slave to the communication control state, the state control section switches said slave to the standby state and further to the communication control state.

13. A communication apparatus as a slave that can communicate with a master, comprising: a communication section, when the master transmits a start request signal to said communication apparatus, for receiving the start request signal,

15 wherein said communication apparatus can take any of a start state in which said communication apparatus can communicate with the master, a communication control state in which at least said communication apparatus can receive the start request signal transmitted by the master and makes a transition to the start state upon reception of the start request signal, or a standby state in which power is less consumed than in the start state or the communication control state, and

wherein said communication apparatus further comprises a state control section for repeatedly operating so that said communication apparatus in the standby state is switched to

the communication control state at a predetermined timing and is switched to the standby state when the communication control state continues for a predetermined time period without receiving the start request signal.

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14. The communication apparatus as claimed in claim 13, wherein the communication section receives the start request signal by radio communications.

15. A communication control method in a slave that can communicate with a master, the method comprising:
making the slave a start state in which the slave can communicate with the master;
making the slave a communication control state in which

at least the slave can receive a start request signal transmitted by the master and makes a transition to the start state upon reception of the start request signal;
making the slave a standby state in which power is less consumed than in the start state or the communication control

state; and
performing repeatedly an operation of switching from the standby state to the communication control state at a predetermined timing and switching to the standby state when the communication control state continues for a predetermined time period without receiving the start request signal.

16. The communication control method as claimed in claim 15, wherein the slave receives the start request signal by radio communications.